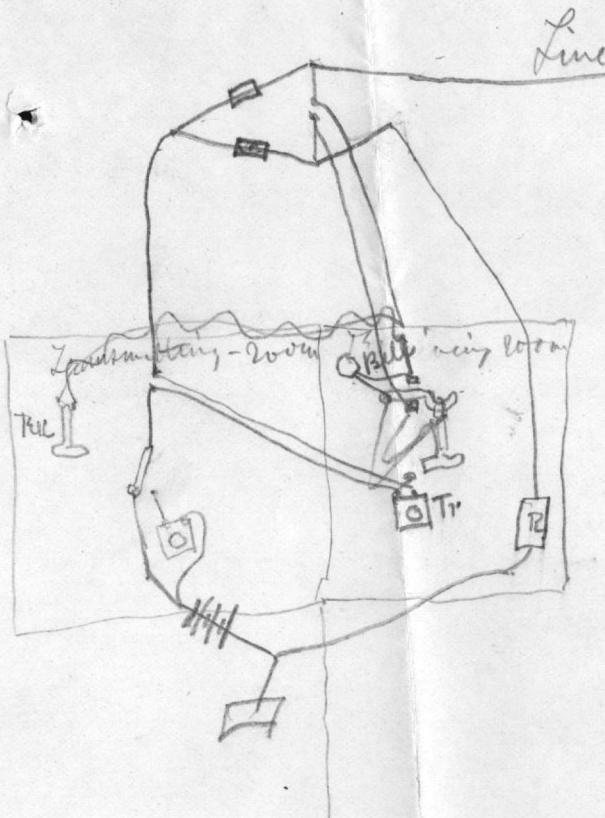
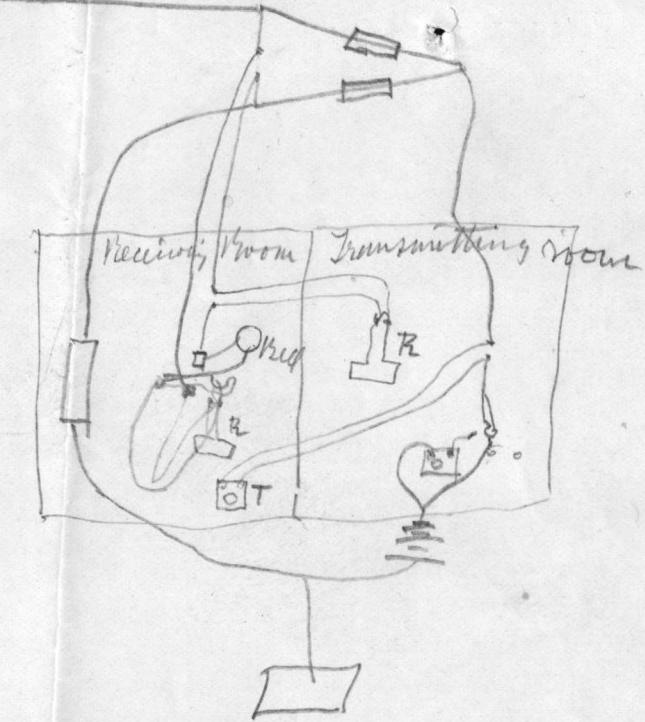


Aug 4th 1879

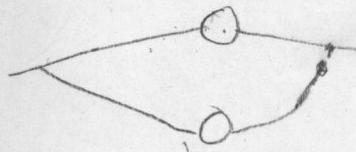
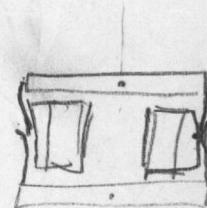
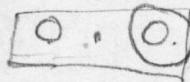
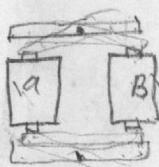


J. G. O.
Aug 4th 1879

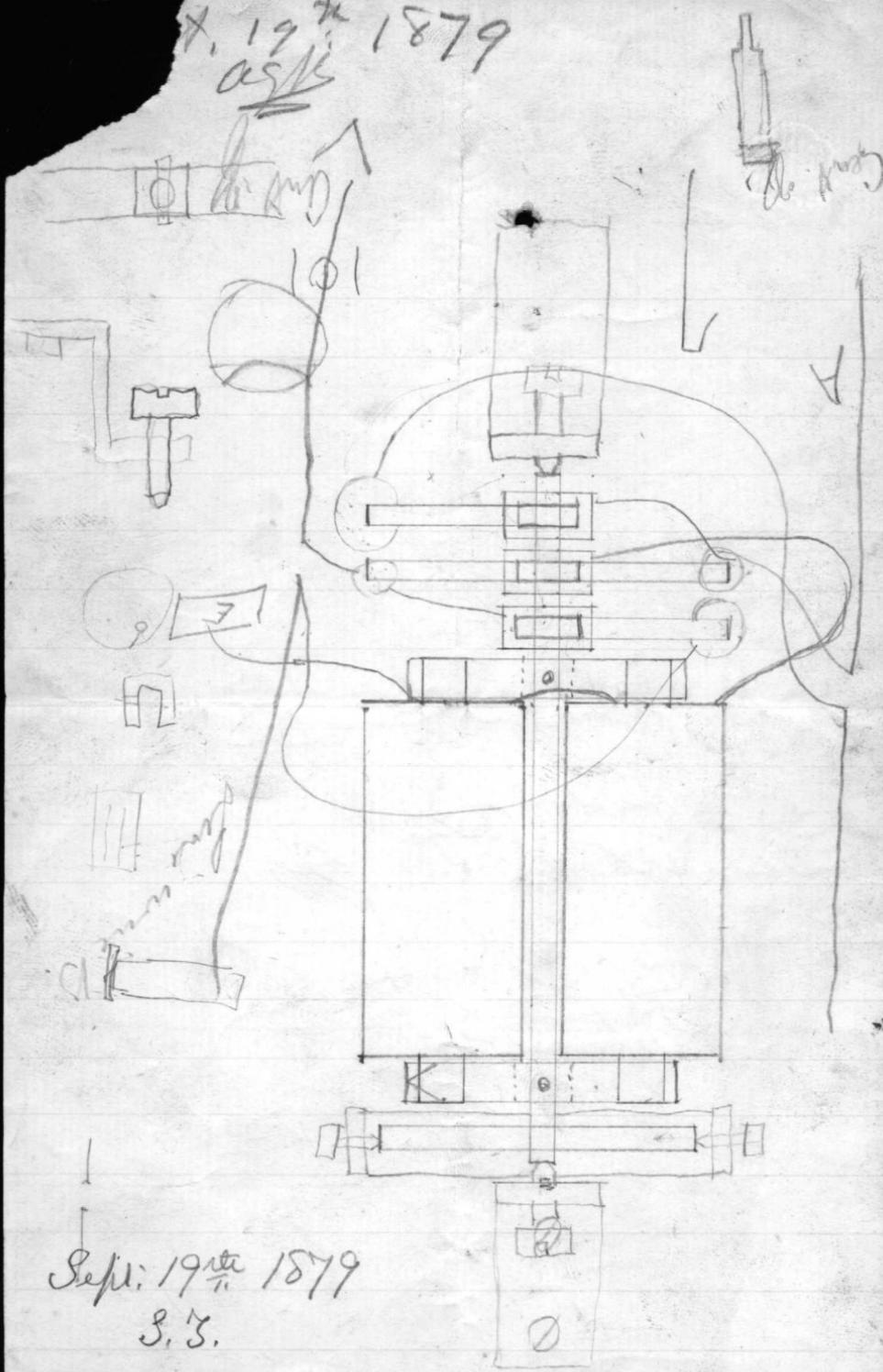


J. G. O.

Sept. 6th 1879
apple



Sept. 19th 1879
as per



Sept. 19th 1879

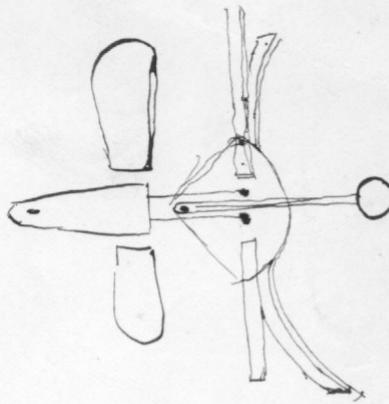
S. S.

Off Sept. 20th 1879

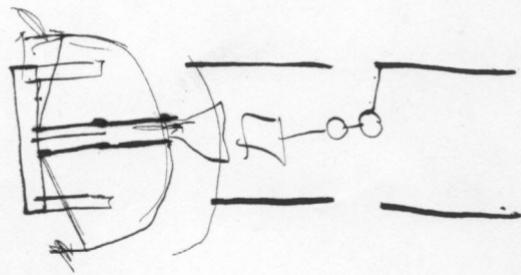
S.M. 214 - 1079

S.J.

I.J.D.



"d."



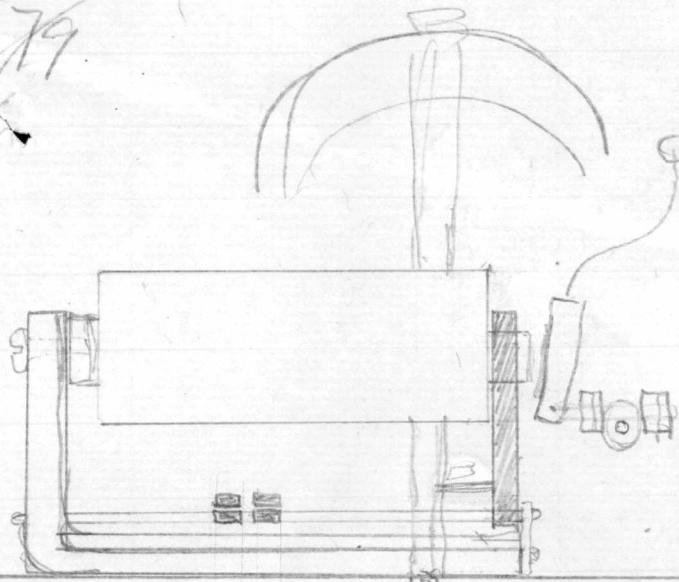
Sept. 20th 1879

ang

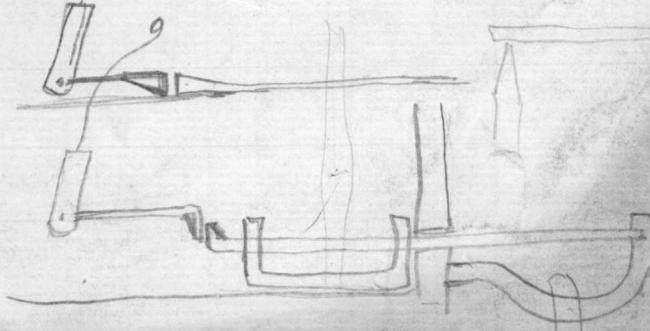
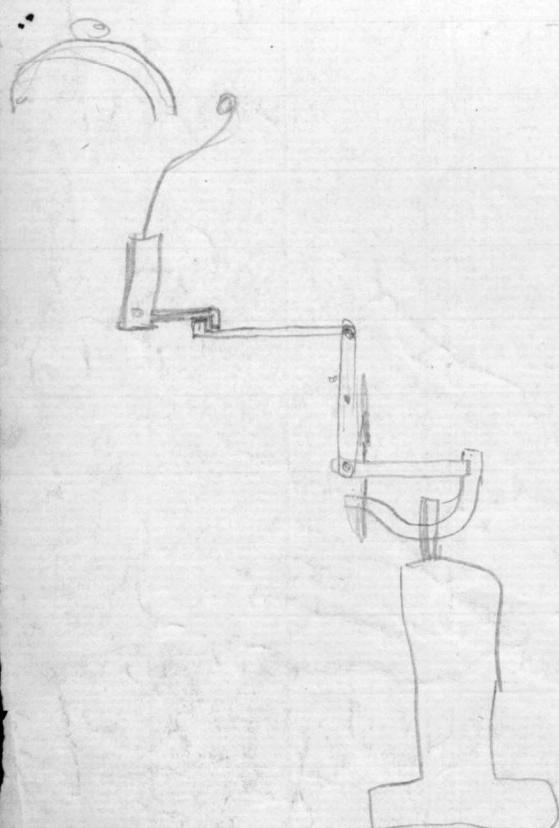
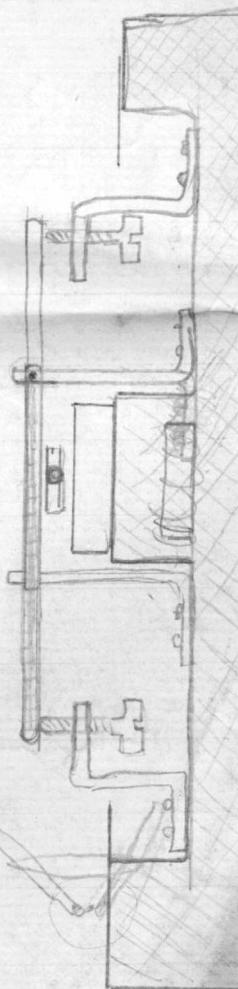
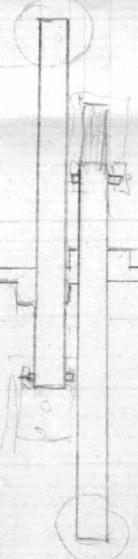
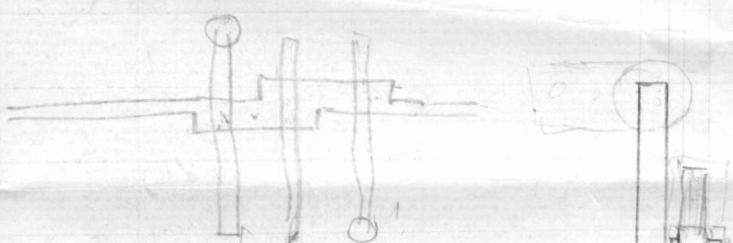
Sept. 21st 1879

S. Y.

J. J. O.



air

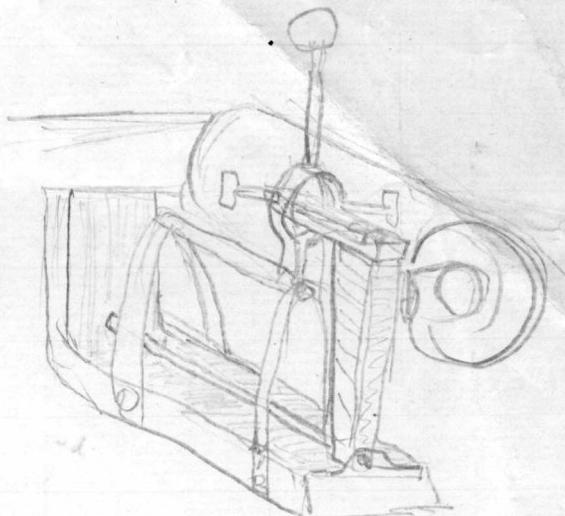
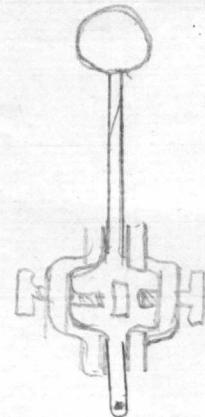


Sept. 2nd 1879
aff

Sept. 2nd 1879

S. J.

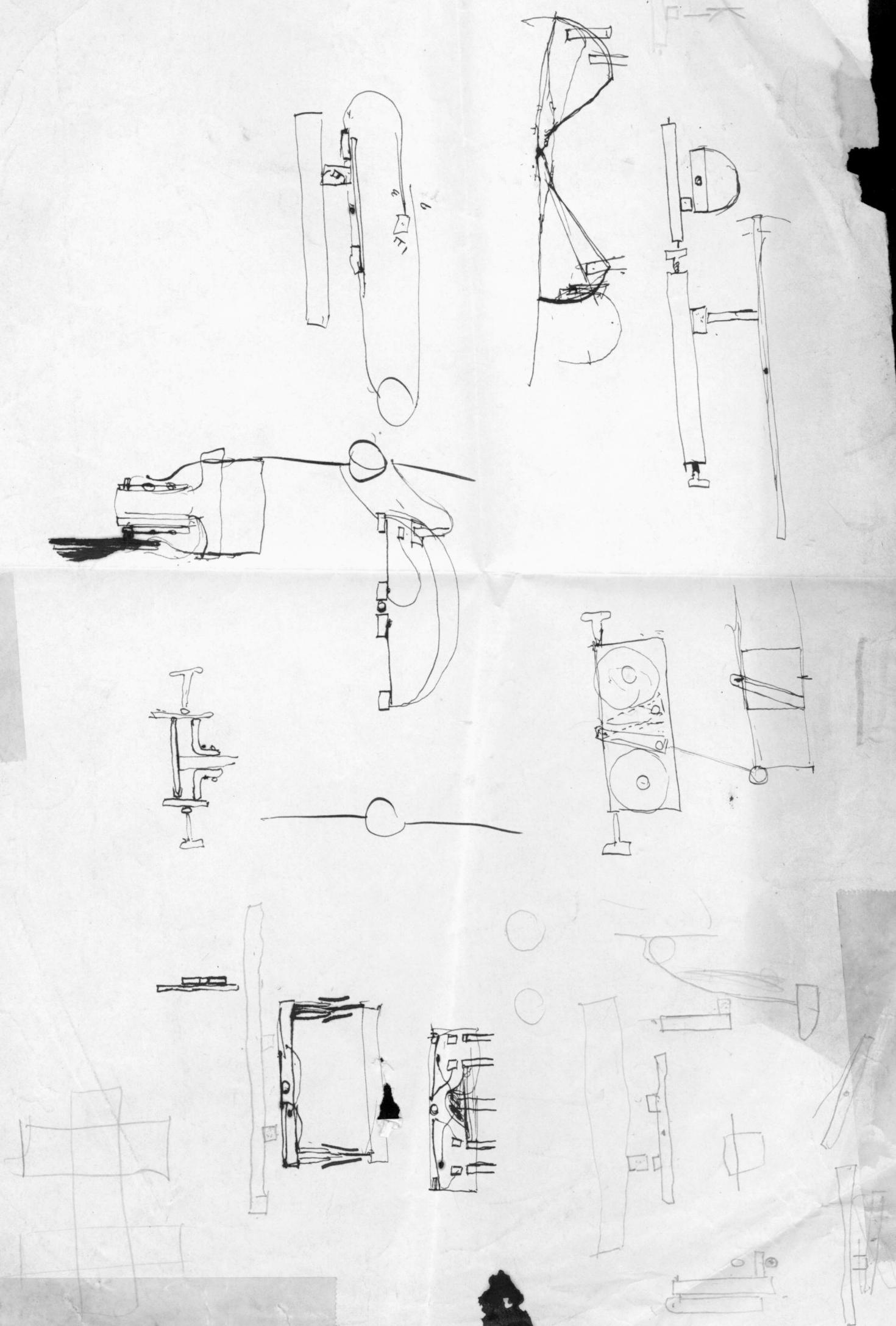
9



Sept. 24^{3rd} 1879
8 M. a.m.

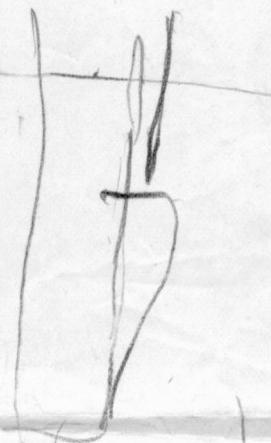
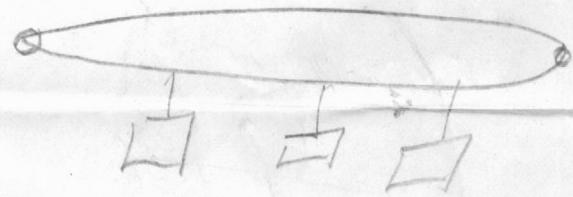
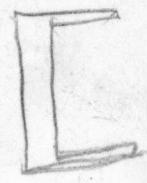
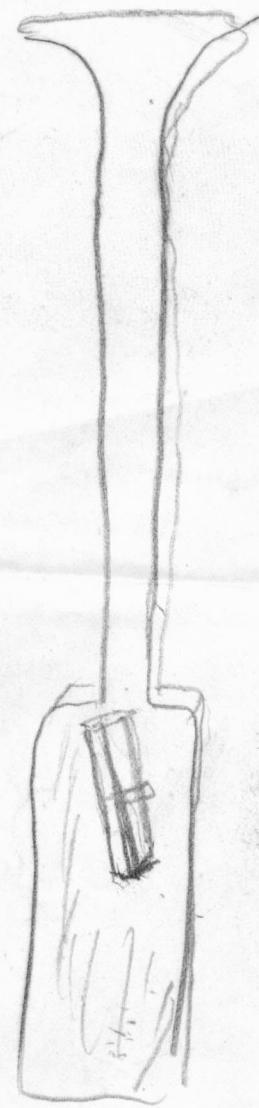
S. S. 

Brown last night
Sept 26th A.D. 1879

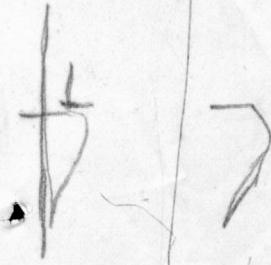


Aug

1879



+



+

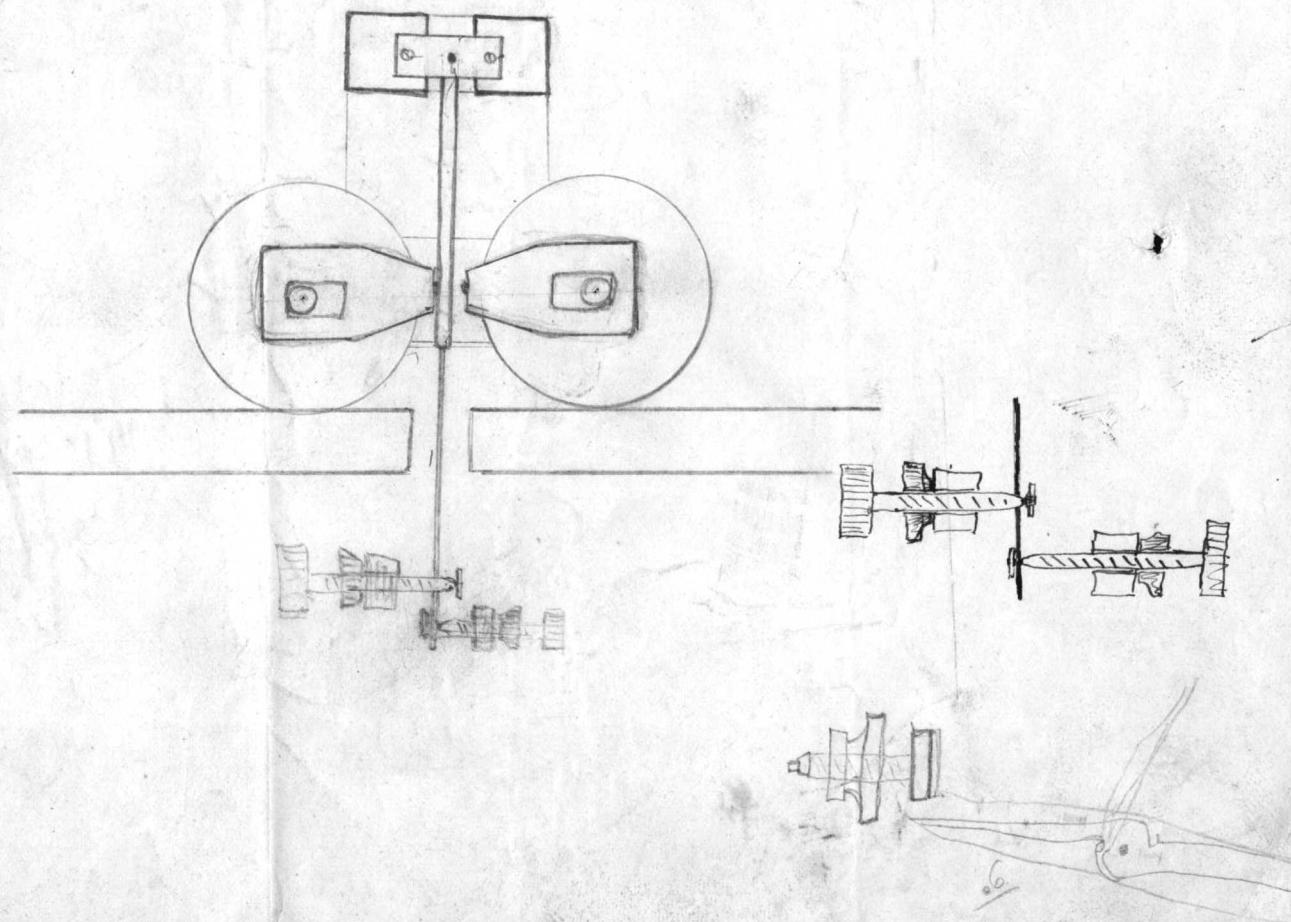


A — B

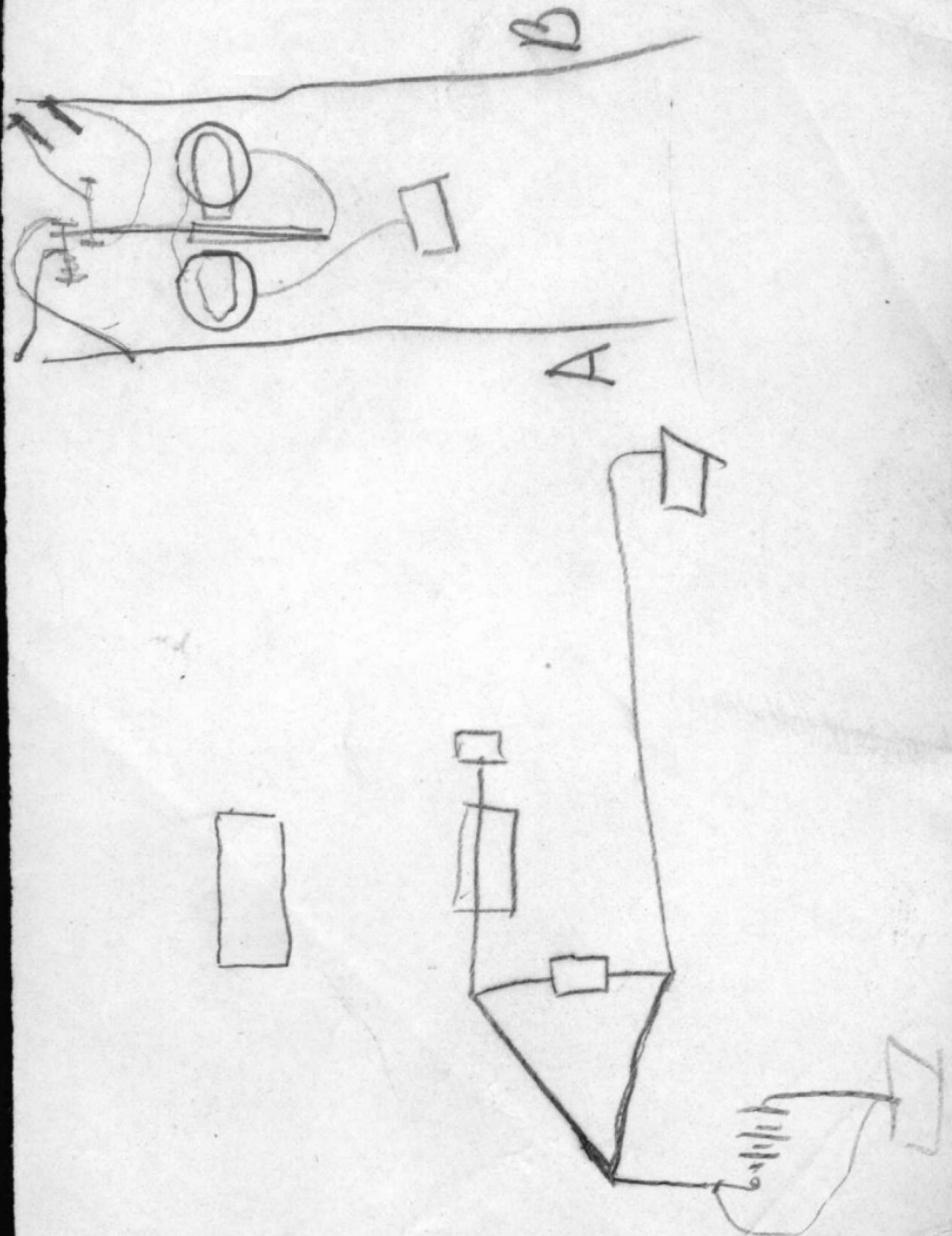
August 4th 1879

Vertical section along line A B (Fig 1)

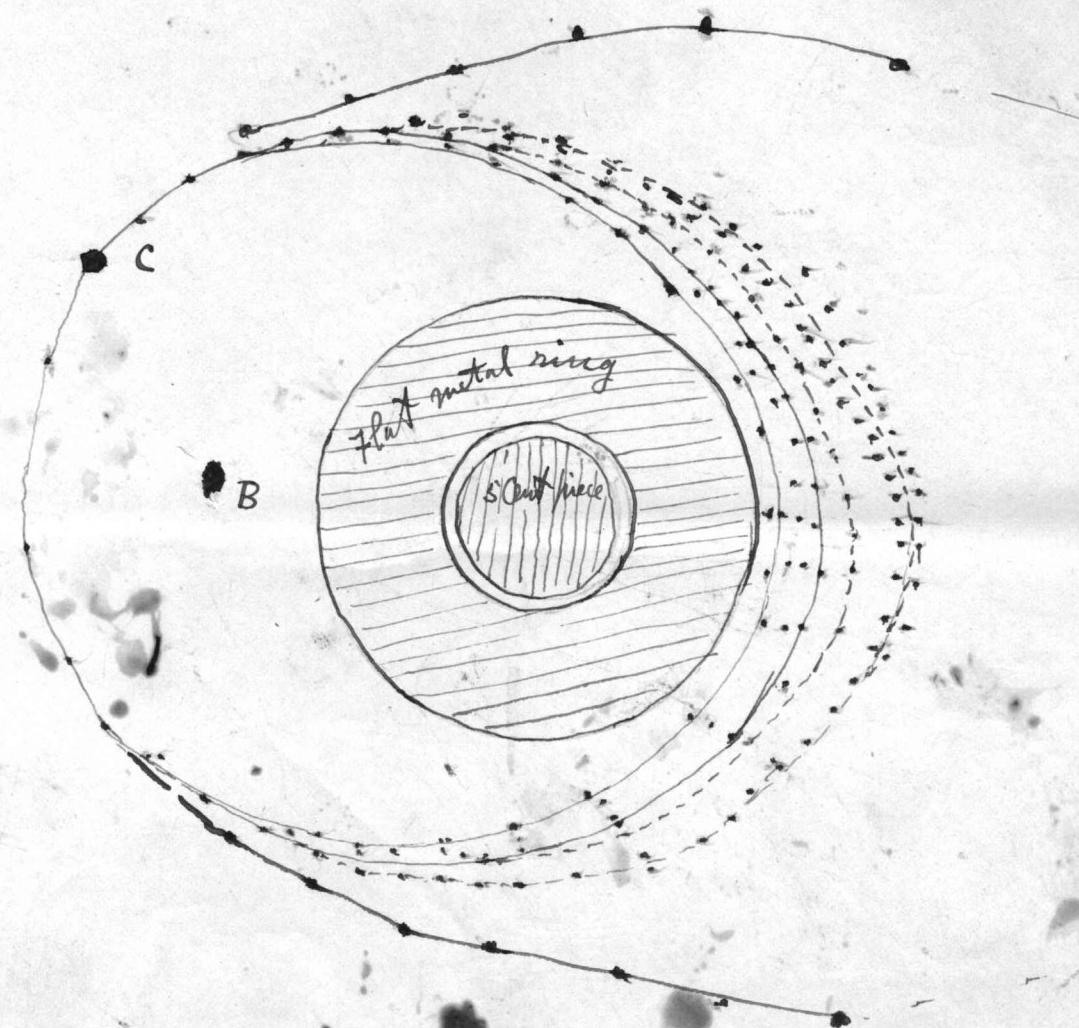
Fig 2



Aug. 4th 1879

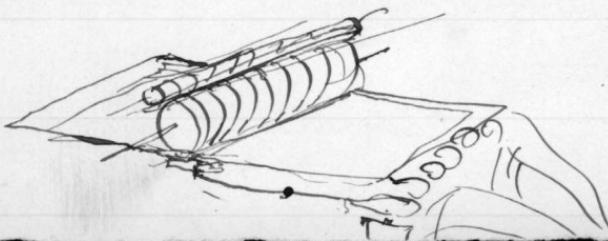
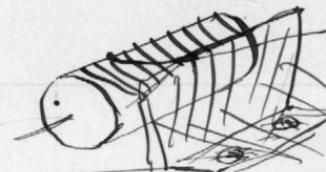


Tuesday February 11th 1879





Feb. 12th 1875.



Early ^{Tel} ~~Elect~~ Experiments

My dear Mr. Bell,

I do not remember
your lawyer's address, so send
the enclosed to you —

Sincerely yours
Sarah Bell

Recd. April 15/92 in
presence of Mrs A.C. Bratt.

J. Hiltz

July 26th 1879

alternated
currents drawn
arrangement & right.

S battery is thin.
Commutator will
turn ~~A~~ which is the
7 coils on right

- A Person at station breaks
connection with ~~A~~ coil
allows him to open his curtain
by having a magnet activated
by battery in main office.
A card to Mr. Sacramento
dropped at Central Office.

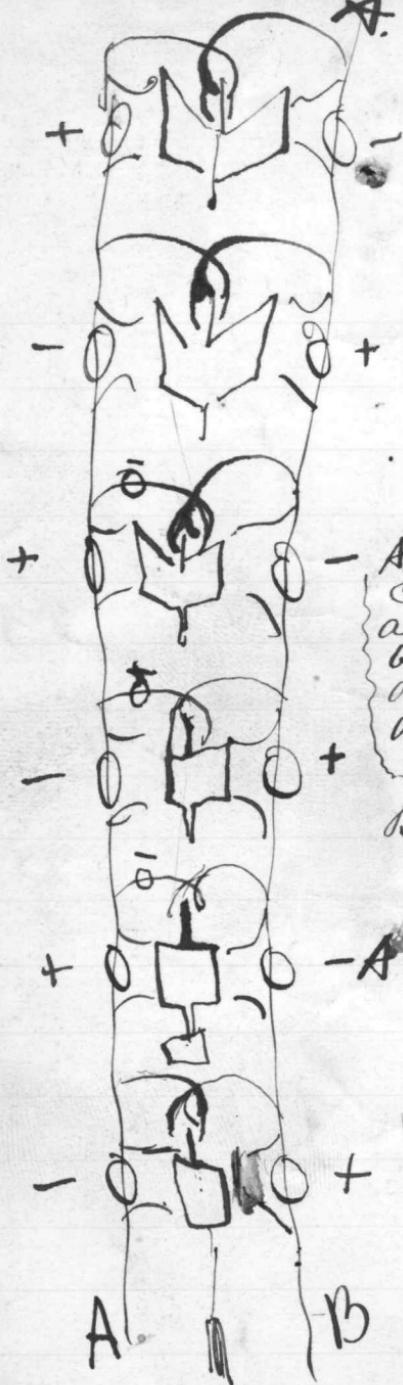
B

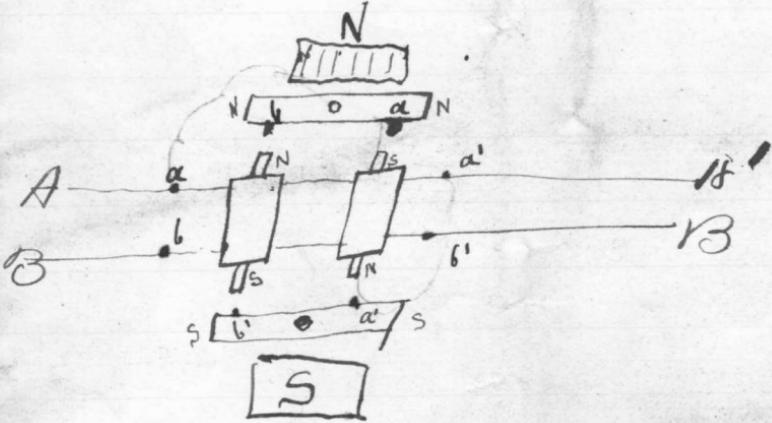
- A

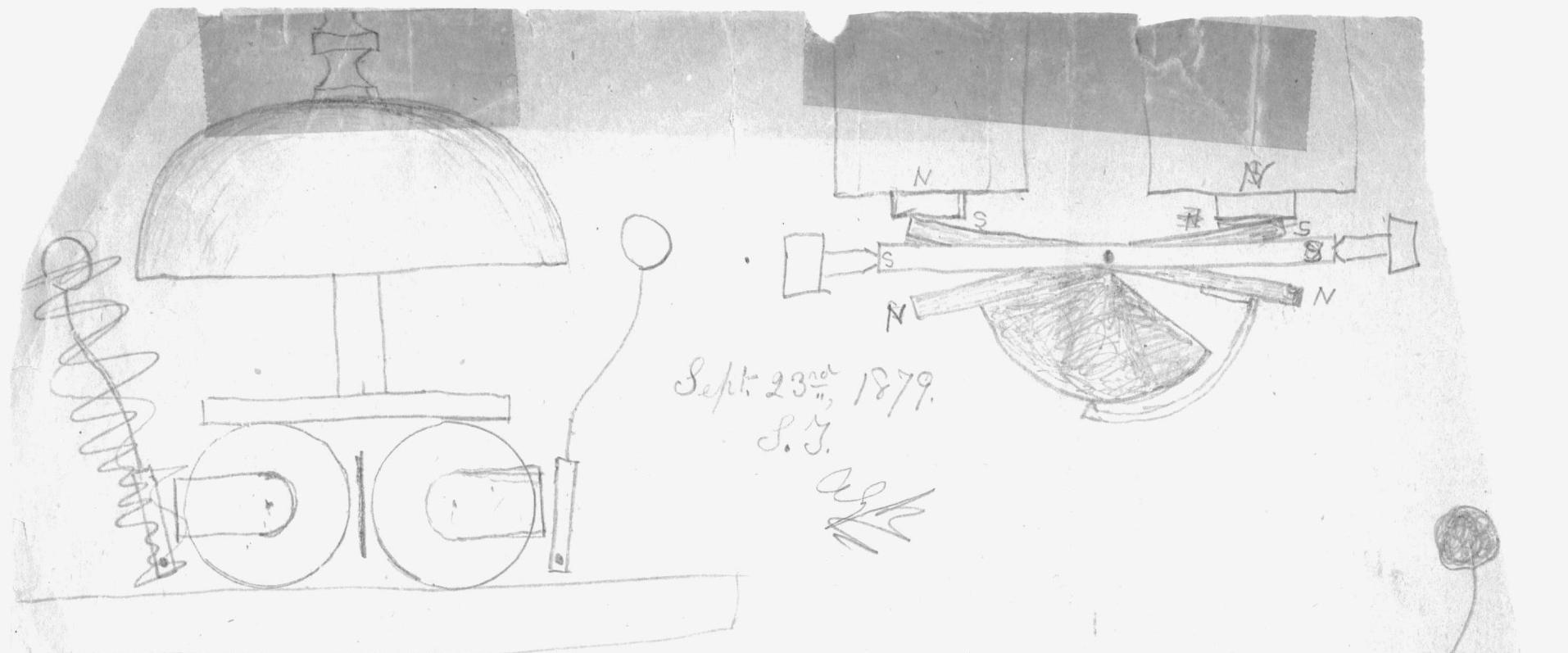
V

+

B

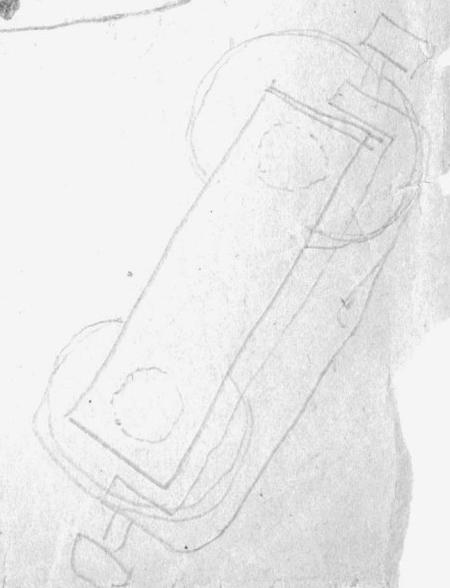
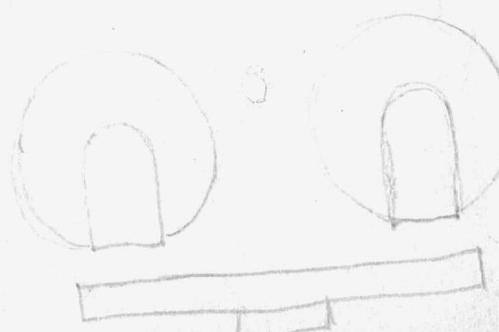
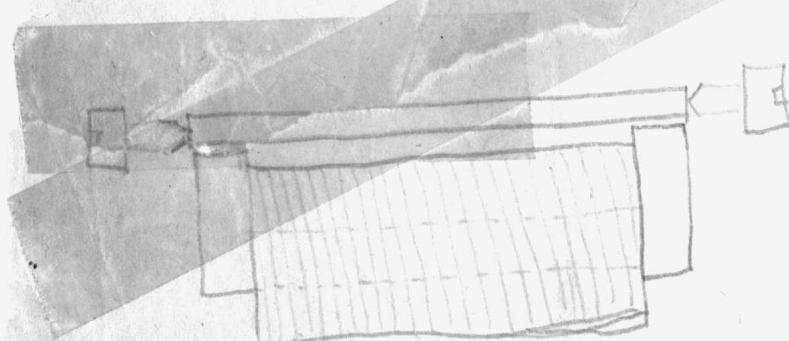






Sept 23rd, 1879.
S. J.

G.W.



1902 Jan 8 - Ned - at 1331 Corn. Ave.

AGM



Telephone Cap



Telephone Diaphragm

2

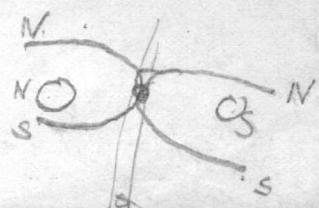
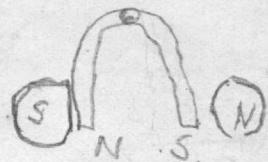
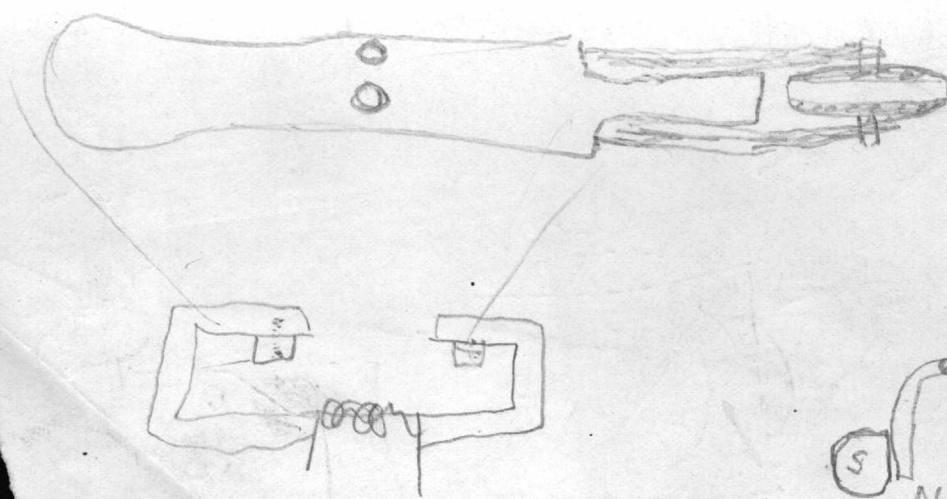
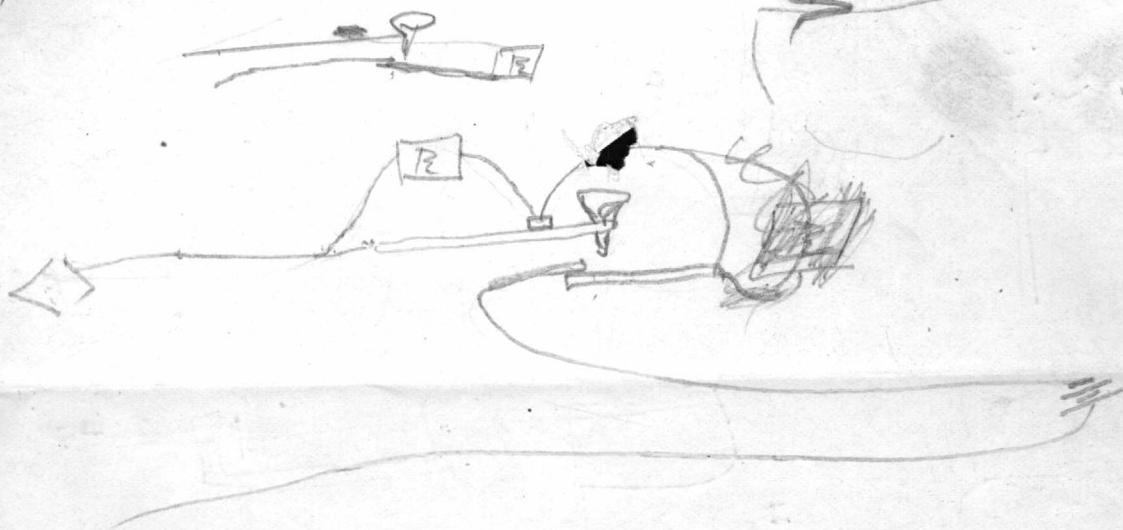
3



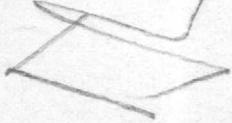
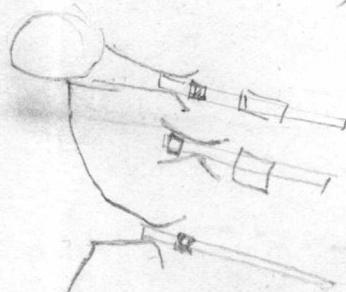
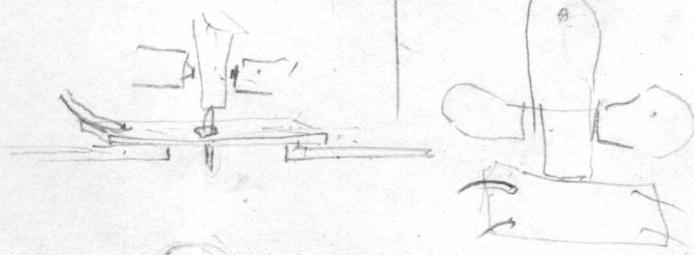
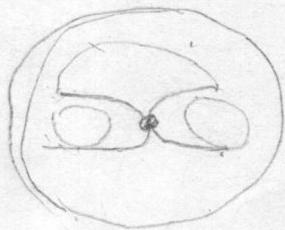
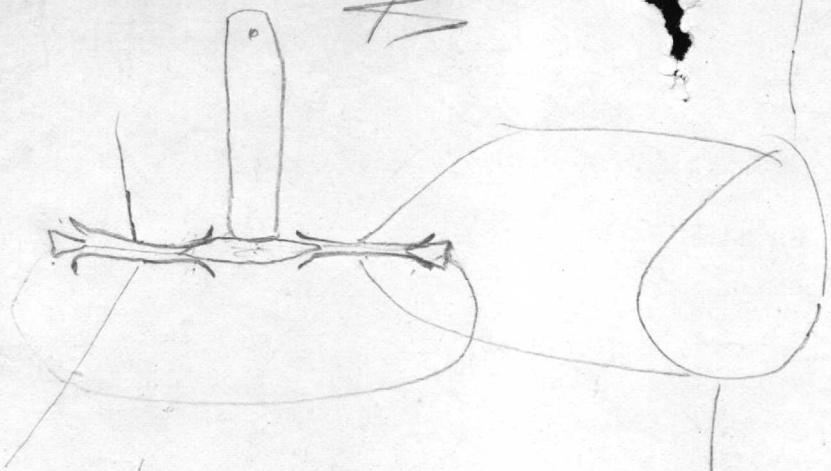
used carburee
metallic face - base

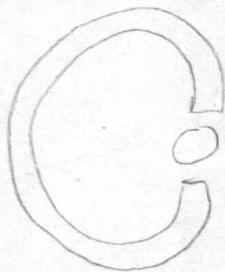
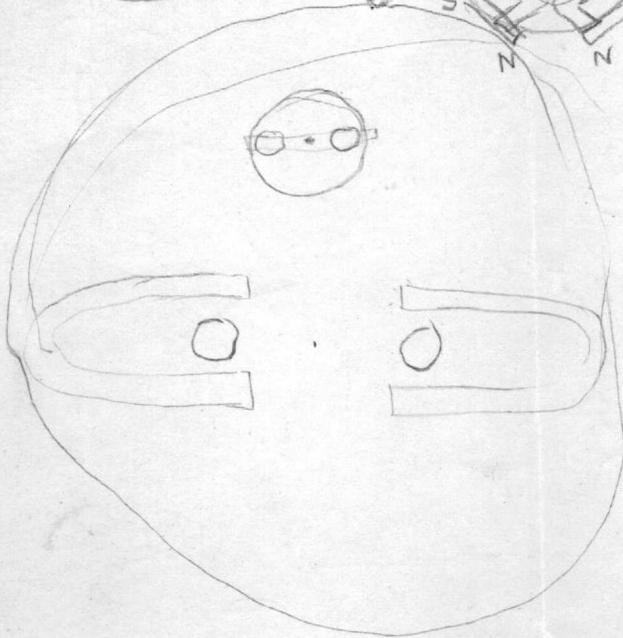
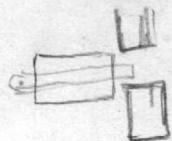
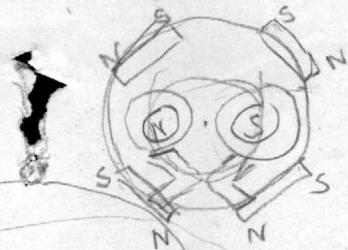
Non-metallic
ring to separate
diaphragm from
metallic base (body)
small space between

Sept. 10th 1879
age 16



Sept. 16th
1879
~~1879~~

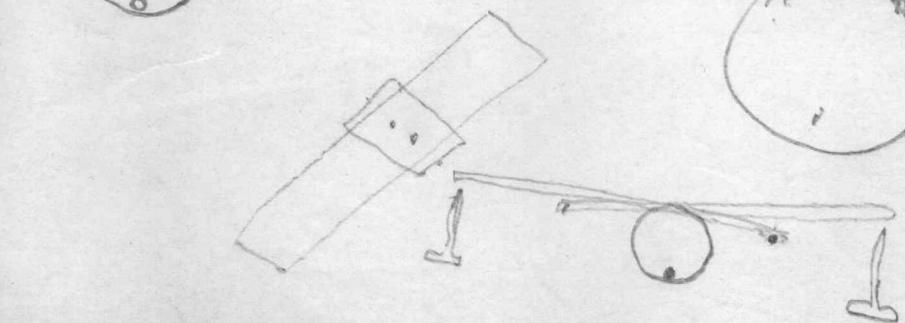
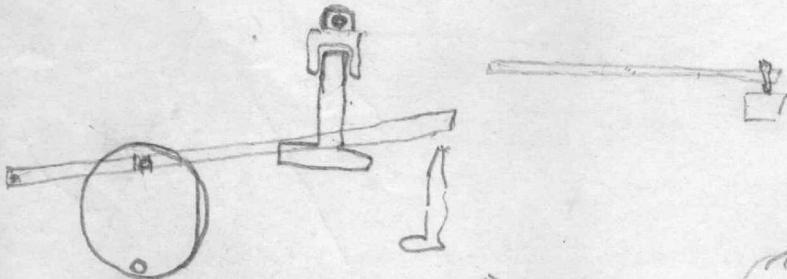
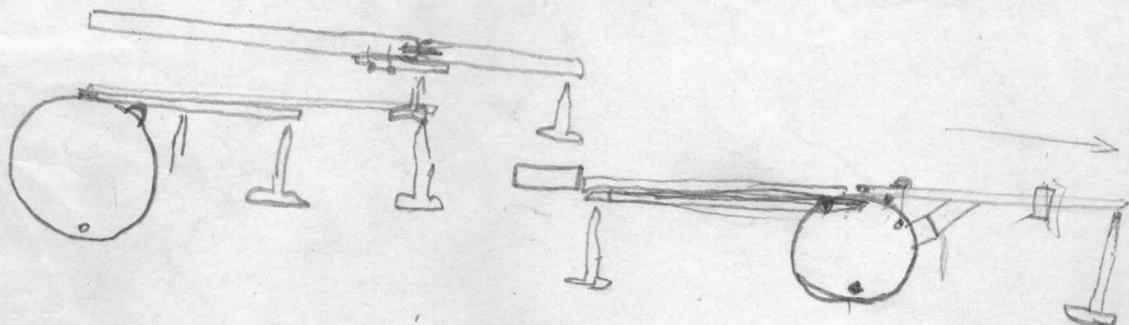
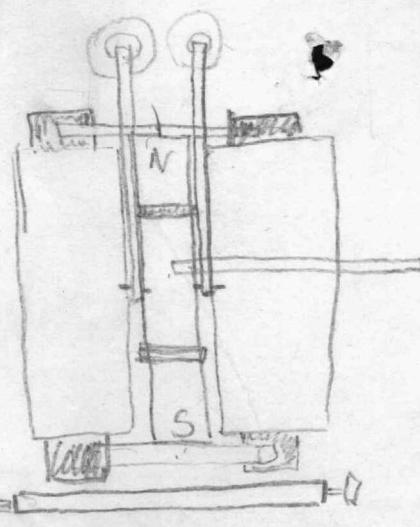




Sept. 19th 1879

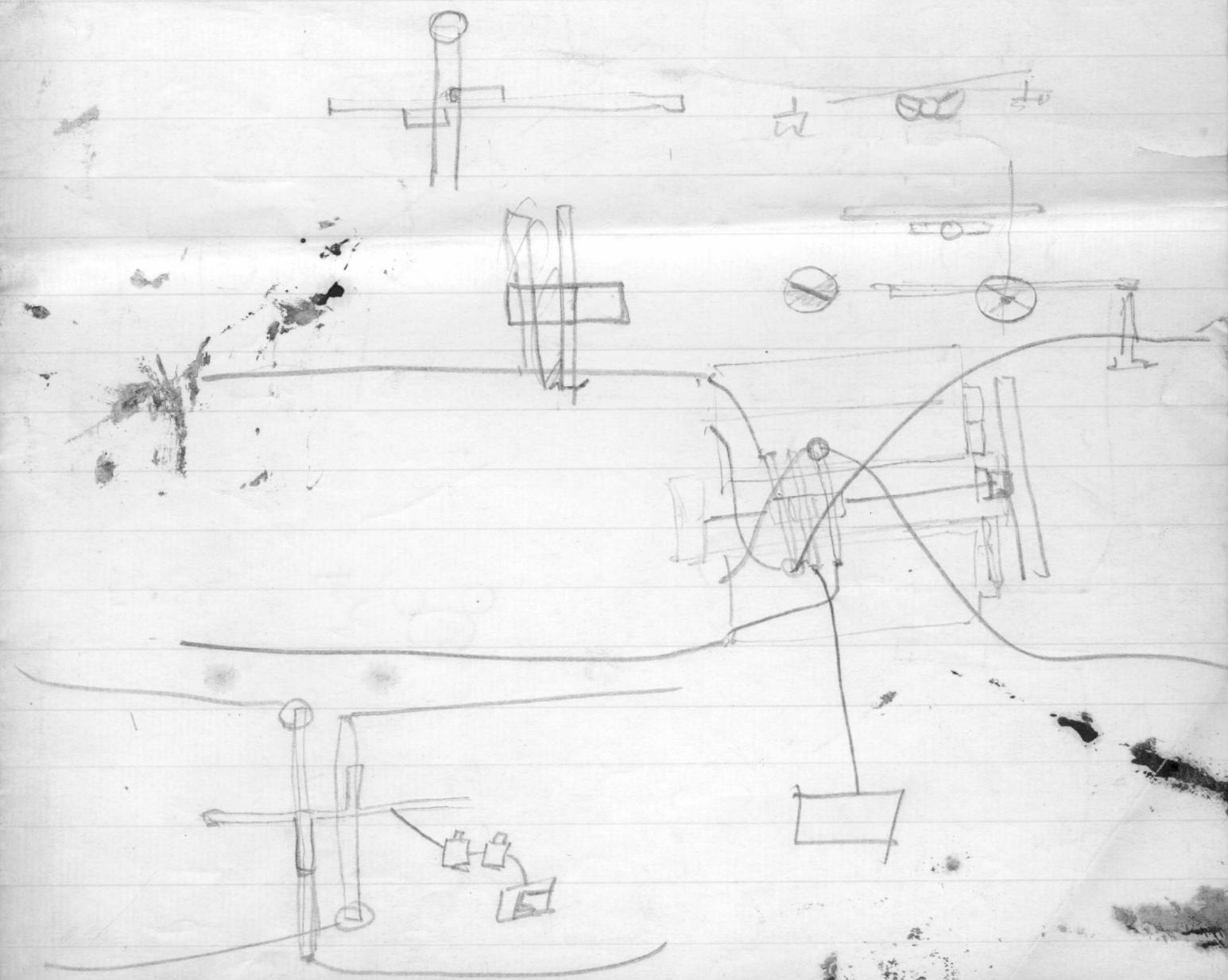
~~arg~~

S.J.



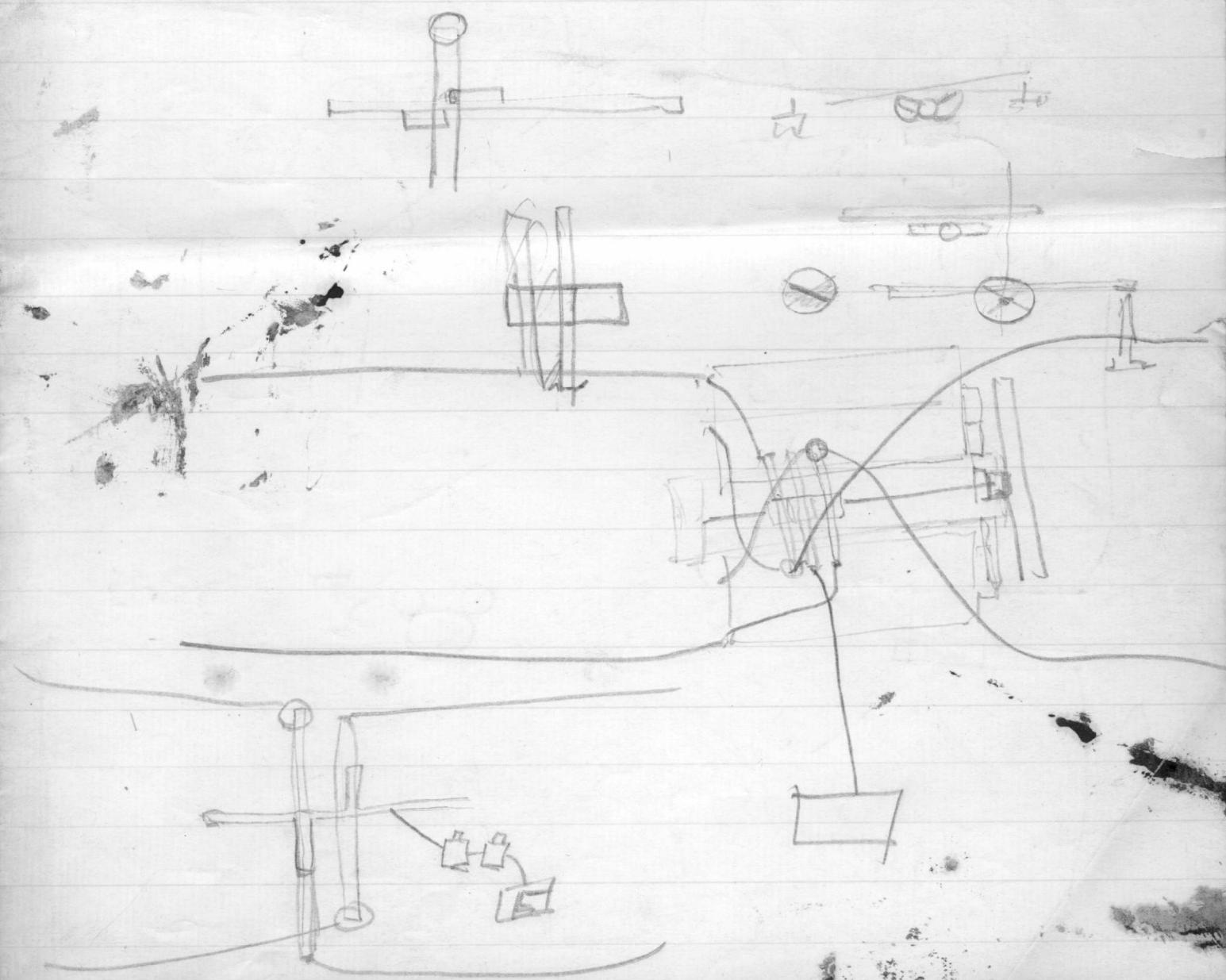
~~Sept. 20th~~ 20th cor
~~ayb~~

Sept. 21st-
J. J. O.



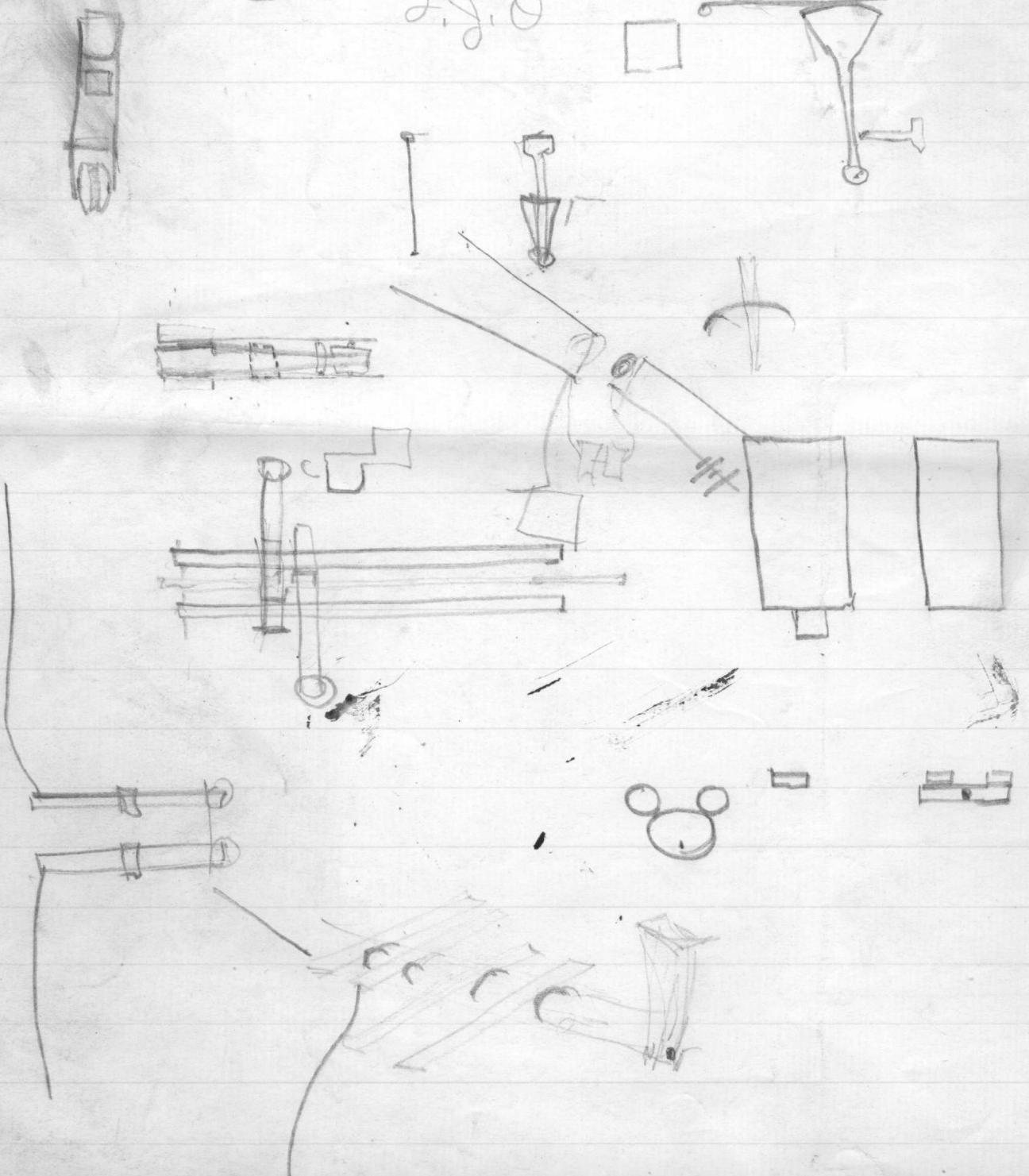
~~Sept. 20th~~ 20th cor
~~ayb~~

Sept. 21st-
J. J. O.



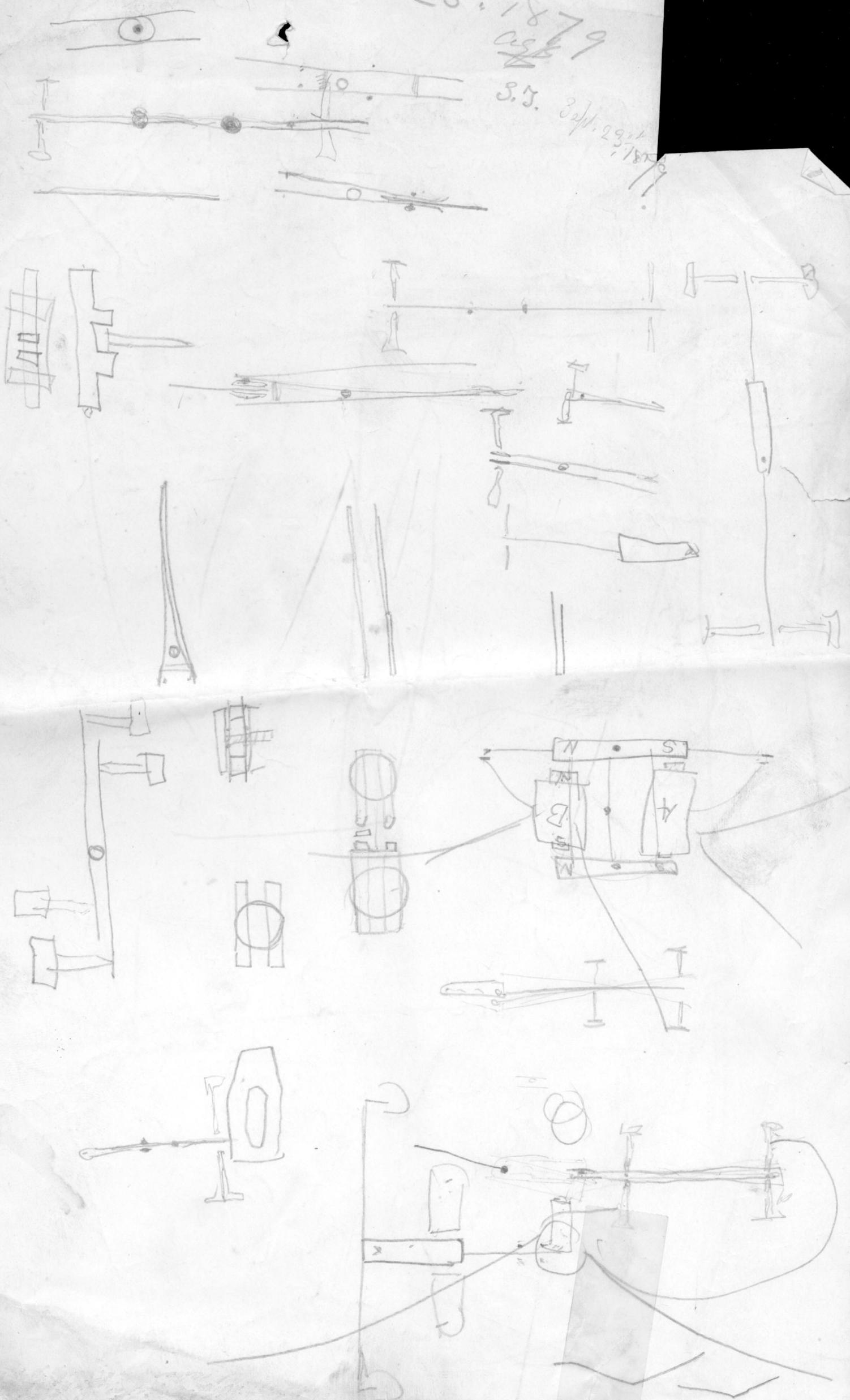
Sept 20th 1879
ask

Sept 21st 1879
D.G.O.

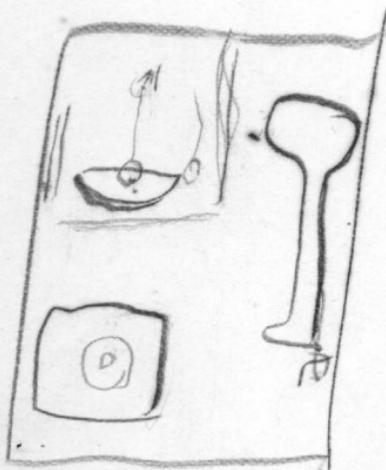


Sept. 23. 1879

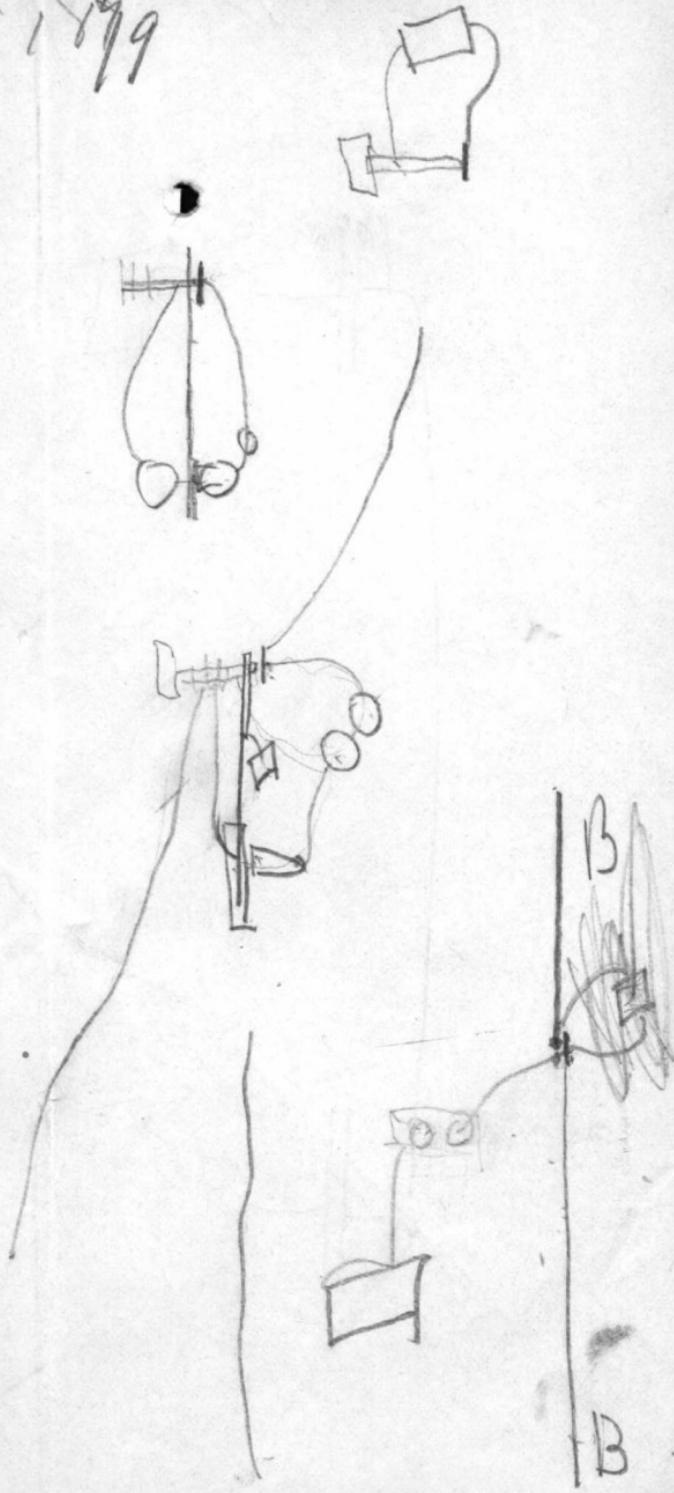
5.5.

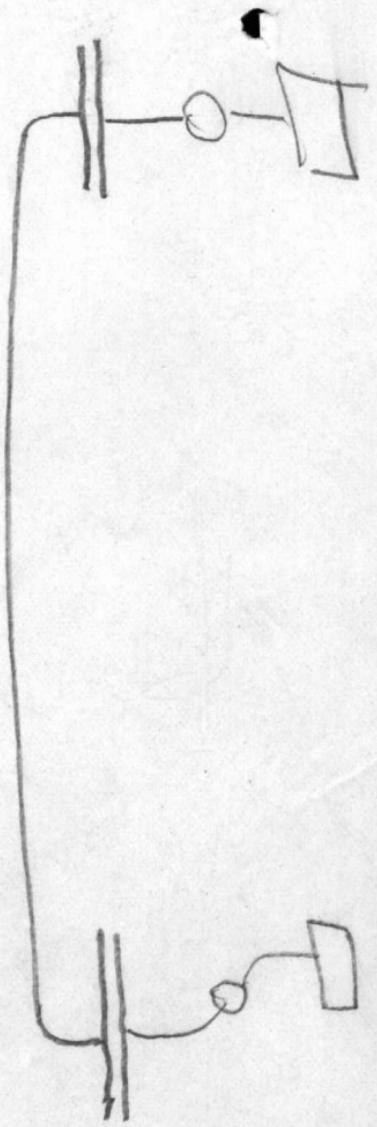


Aug. 4th 1879



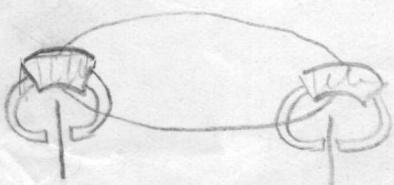
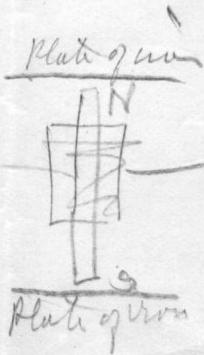
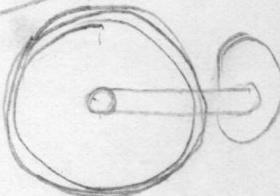
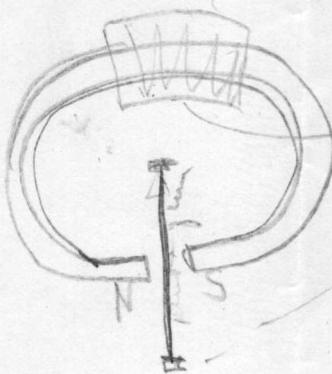
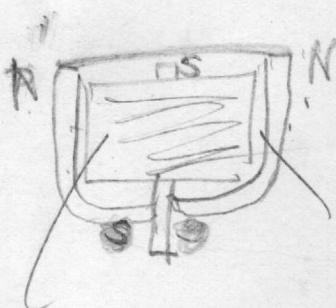
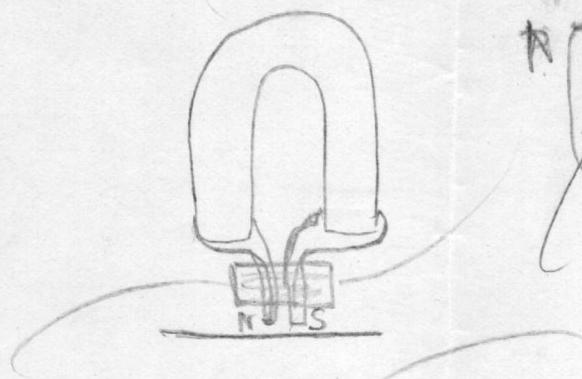
Aug. 4th 1879



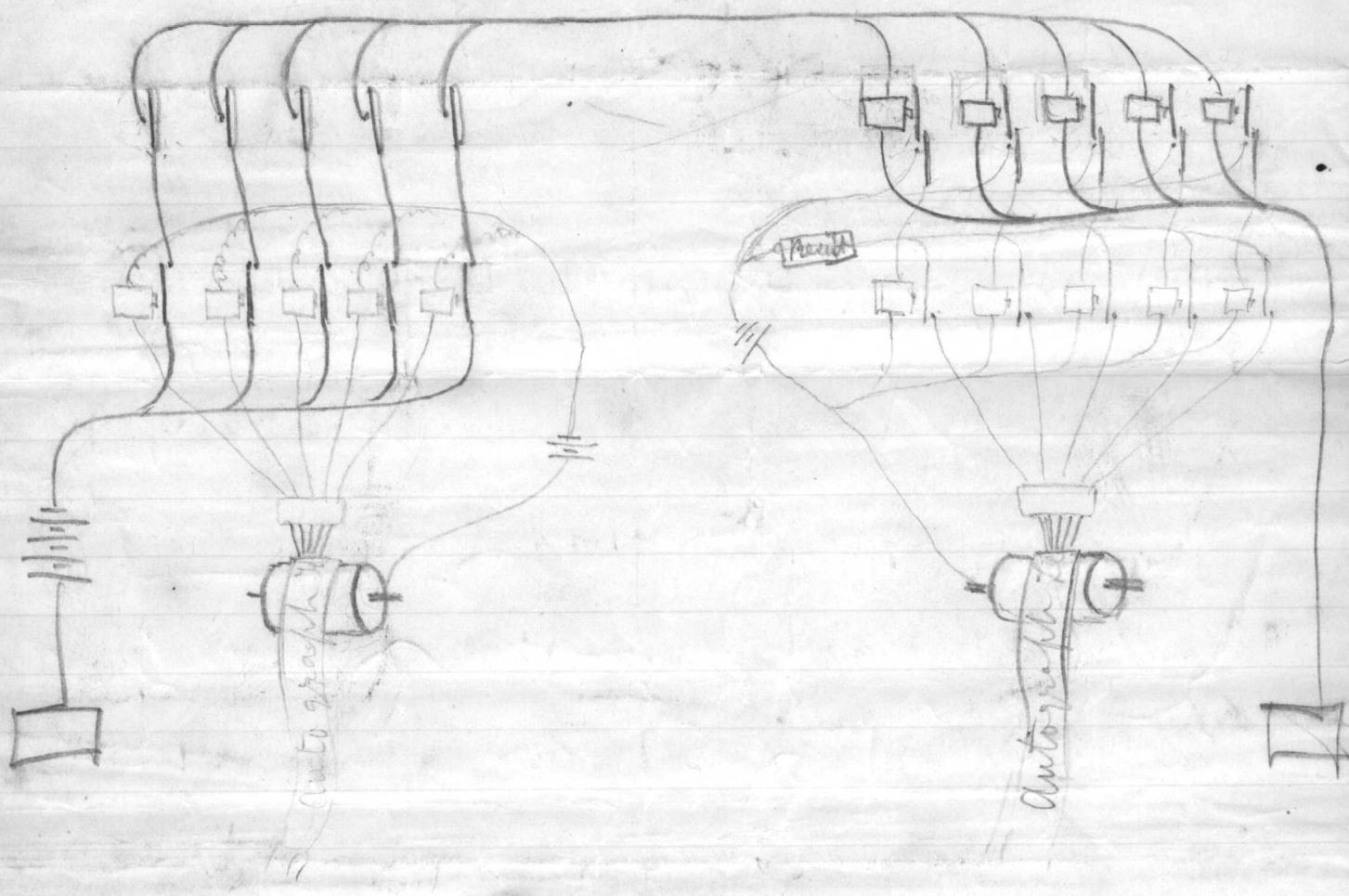


Saturday January 27th 1877

(Solenes)

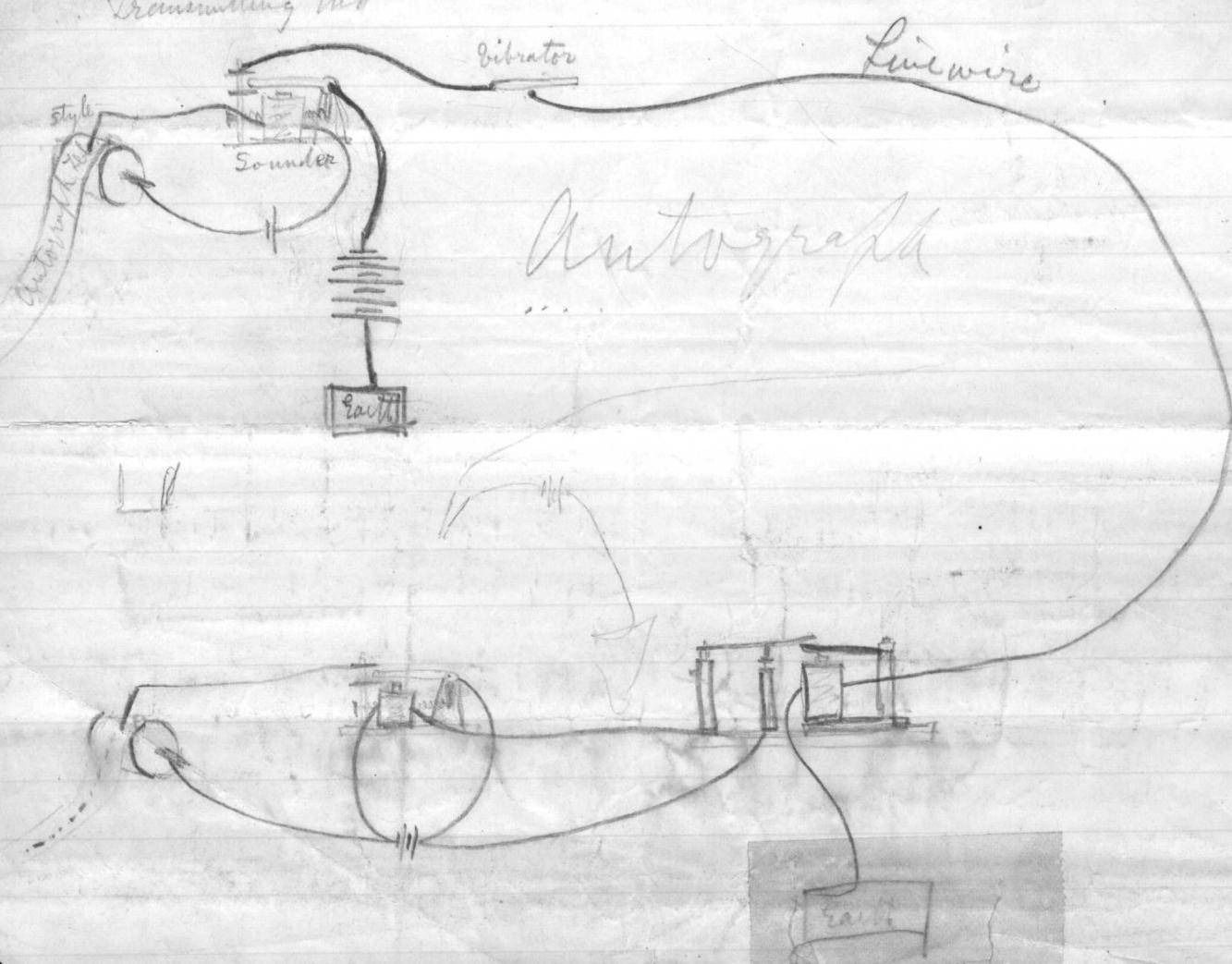


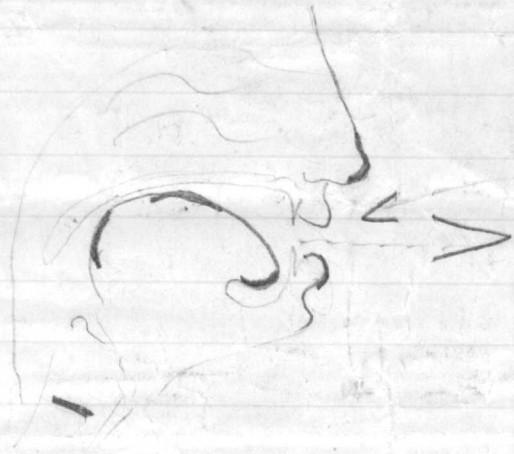
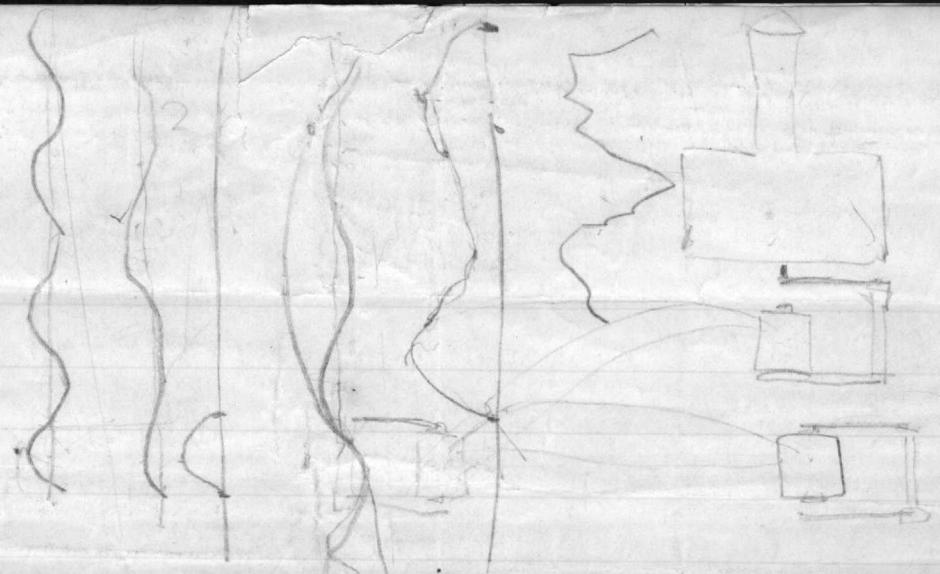
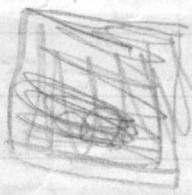
Autograph Telegraph as completed July 1875



Action illustrated by a single style-

Transmitting End





< > < > < >

I C -) S > <

= H

D < A > D

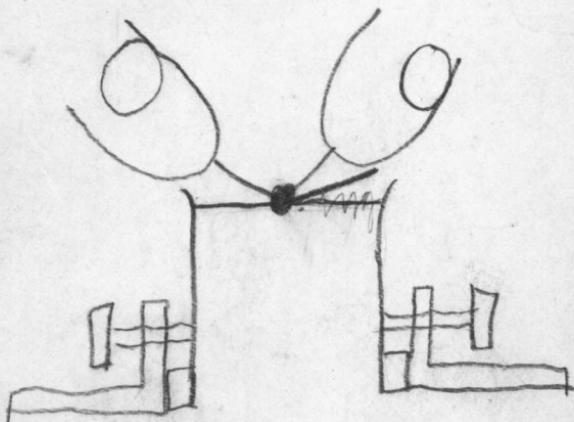
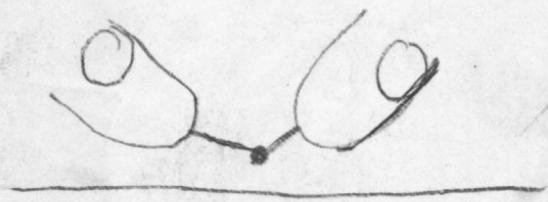
D D D C

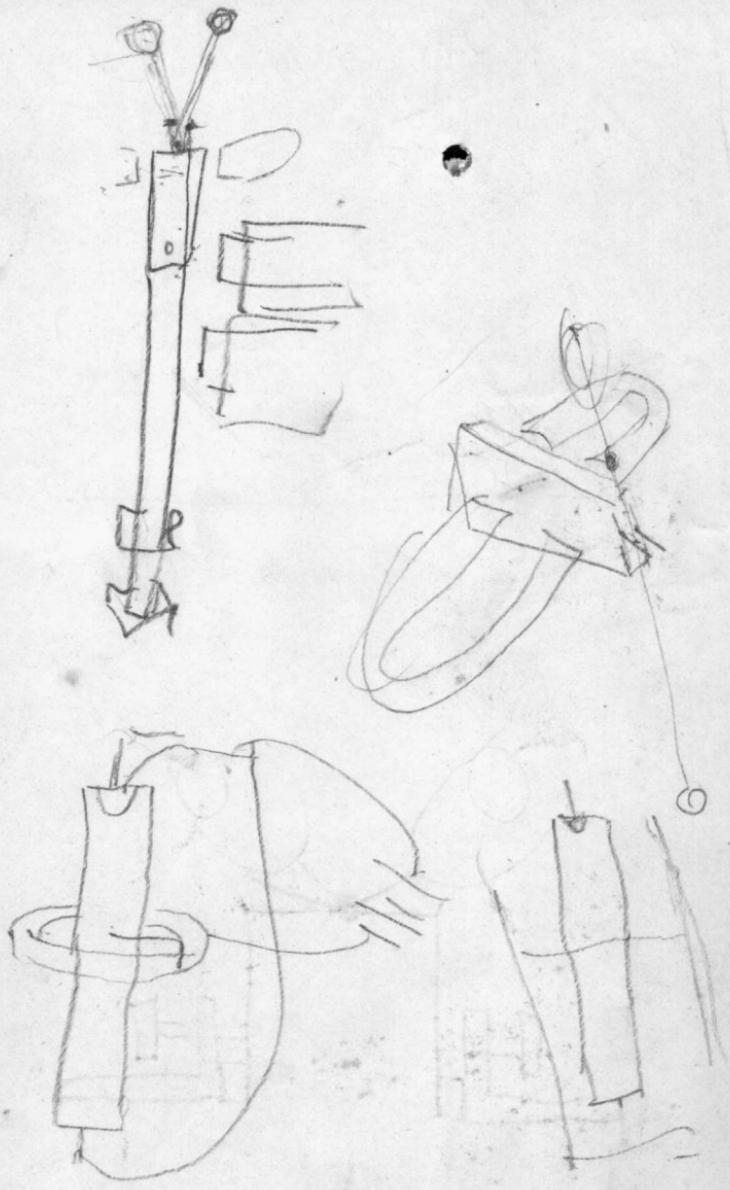
Q Q Q

T T D E

S D O E

Sept. 18th 1879
S.J.

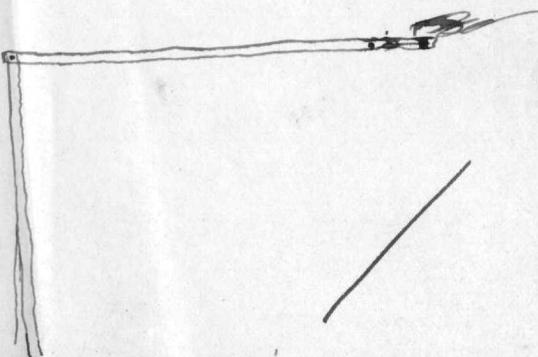




Thursday Feb. 13th 1879

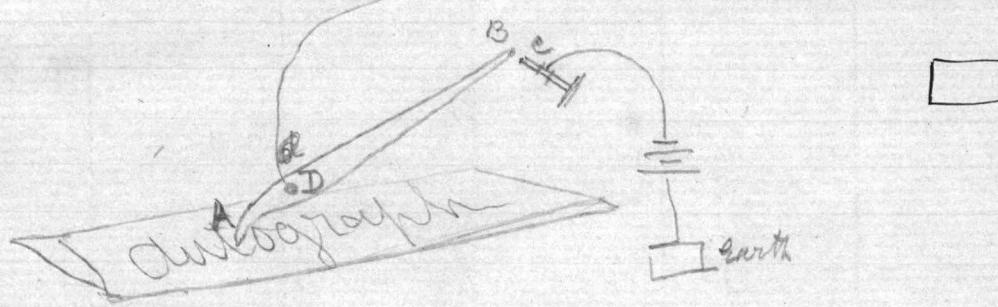
Produce a uniform circular motion by the combination of two vibratory movements at right angles to one another and produce the vibratory motions by the varying attraction of a magnet or magnets. A wheel could be kept in continuous ~~revolution~~ rotation by such means and it might either ^{would} be controlled by the vibrating levers so as to be strictly uniform. Such a method could be used for an electrical clock-movement and even as ^{an} electro-motor.— ~~Probably~~

Even if the levers had no definite rate of vibration but were simply controlled by magnets a motor could be constructed first suppose no definite rate but simply hinged levers A & B



February 18th 1876.

Line wire



Yesterday W. Watson suggested a device for a new style for the Autograph Telegraph. We have tried it this afternoon and it promises complete success. We write upon ordinary paper with ordinary ink and take advantage of the ink surface being raised above the paper surface.

~~The Cover and C~~ The message is to be written upon ordinary paper with ordinary ink or to be embossed like raised letters for the blind. The end ~~A~~ of the lever ~~AD~~ ^{sufficiently long} B is raised when the ink surface passes underneath, ~~so it comes~~ the point B against C in contact with C.

In the style tried this afternoon the arm DC was $3\frac{1}{2}$ times as long as AD. I propose to make another Cover in which DC ~~is~~ ^{will be} 10 times the length of AD.

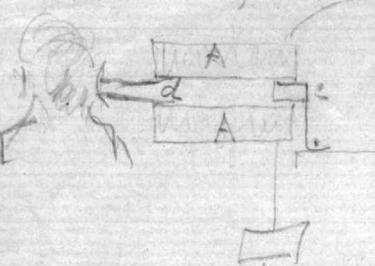
Thoughts.



See if undulatory current is produced Take coil



Action of Helix



Pass undulatory current through empty helix ~~AA'~~ or place iron cylinder in one end & listen at the other. Also try whether manometric capsule attached to d will show curves.

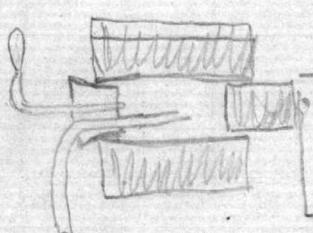
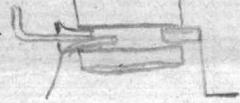
Make transmitting instrument after the model of the human ear. Make armature the shape of the ossicles. Follow out the analogy of nature.

L J

top

By Cylinders

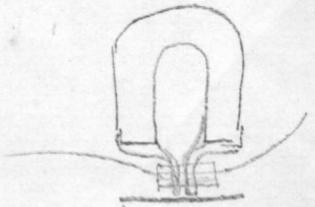
~~Cyathus sold six pairs of scissors.~~



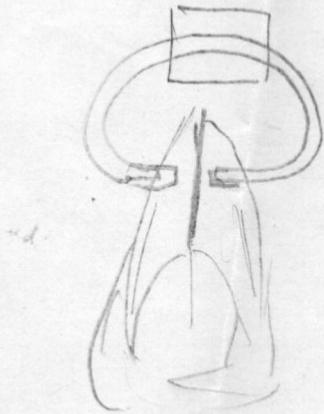
~~Pat. faa. 27th 1878
Notes & Job.~~

1. See page 345 - par. 429 -
last sentence.

2. Try



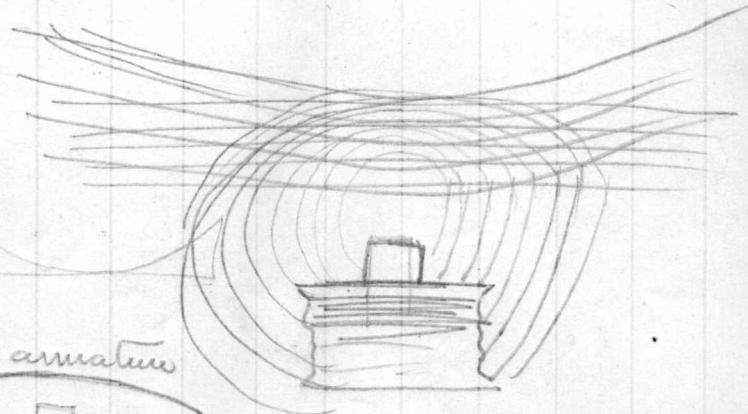
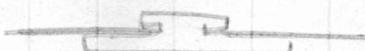
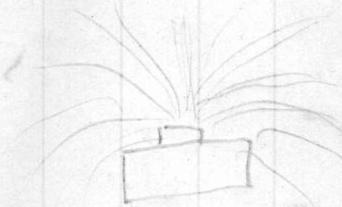
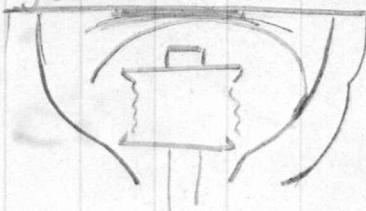
3. Try



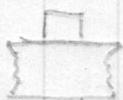
June 22^d 1879

Armature attached to non-magnetic diaphragm, so shaped as to cut the greatest number of lines of force.

non magnetic diaphragm



curved armature

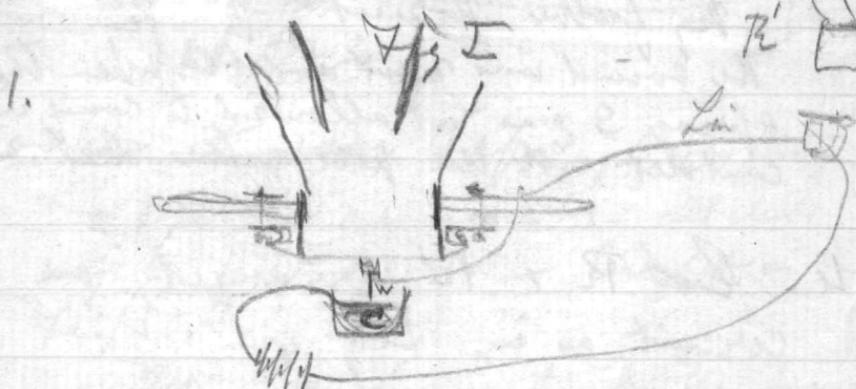


a flat or curved armature calculated to cut a greater number of lines of force

Non magnetic shapbragon curving arward
Concave towards mag.
thicker at the edges
thin in the centre.



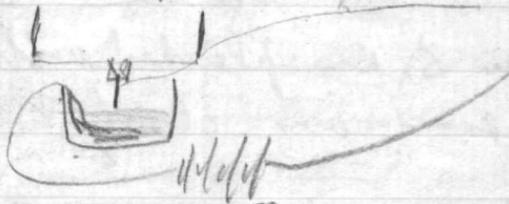
~~Instrument~~
Monday March 27th 1876



1. ~~Instrument~~ A membrane was arranged as in Fig I. w a thick copper wire. c a piece of copper directly underneath with a thin film of liquid between. Little or no sound from the Receiver R 0.21 R'

Fig 2

2.



- 2 Instrument as arranged before, load much heavier - especially from the R'.

3. With Receiver R (Fig 3)

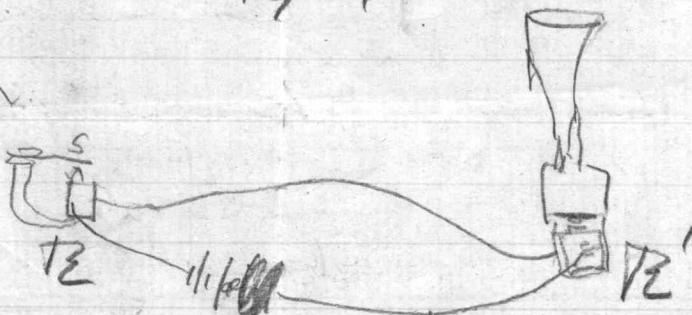


My father noticed that

the sound was most audible when the spring S was not allowed to come into contact with the pole of the electromagnet.

4. And R + R' arranged on circuit as in Fig 4

Fig 4



When S was plucked with the finger the sound was clearly audible from R'.

5. When sounds were sang into R'
the notes were audible from R.

Fig 5.

Fig 5.



6. ~~The two~~ A spring S was fastened to a stretched membrane M - articulate magnet E fastened over it. Circuit as in Fig 5.

Upon singing into A the sounds were heard from R' - and upon singing into R' the sounds were audible from A. The word "Paper" uttered into R' was intelligible at R² - ~~but sometimes~~

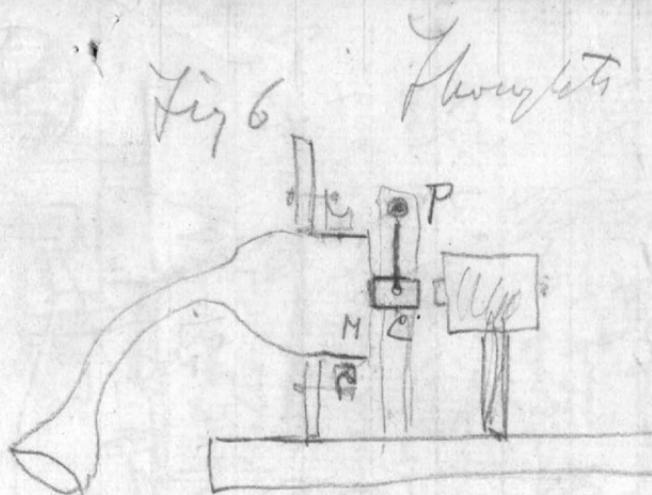
~~Upon calling~~, when words were uttered at R' the indistinct articulate sounds ~~were~~ proceeded from A but were unintelligible.

When words were uttered at A ~~they were audible~~ articulate sounds were audible from R' but were unintelligible.

Printed March 27th

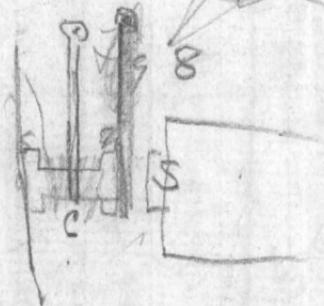
by A. J. B.

Fig 6



Flourlets

Cork & other
Tale



8

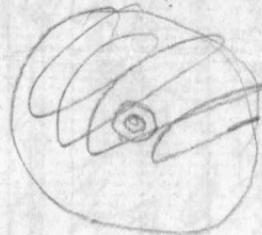


Fig 7.

fa

1. suspend cylinder of iron C (Fig 6) from pivot P, so as to ~~take~~ weight of cylinder from apparatus when bone M
2. Make cylinder C (Fig 6) itself an electro-magnet as in Fig 8.
3. Place bone bone M

point

Rotul Monday March 27th